



20A, 20V - 150V Dual Common Cathode Schottky Rectifiers

FEATURES

- Low power loss, high efficiency
- Guardring for overvoltage protection
- High surge current capability
- UL Recognized File # E-326243
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21

MECHANICAL DATA

Case: TO-247AD (TO-3P)

Molding compound, UL flammability classification rating 94V-0

Part no. with suffix "H" means AEC-Q101 qualified

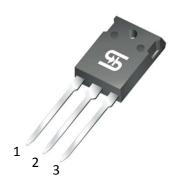
Packing code with suffix "G" means green compound (halogen-free) **Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

Polarity: As marked

Mounting torque: 10 in-lbs maximum

Weight: 5.6 g (approximately)







PIN 1 O-		PIN 2
PIN 3 O	-	CASE

TO-247AD (TO-3P)

MAXIMUM RATINGS AND ELE	ECTRICAL CHA	ARACTER	ISTICS	(T _A =25	°C unles	s otherw	ise note	ed)			
			SR	SR	SR	SR	SR	SR	SR	SR	
PARAMETER		SYMBOL	2020	2030	2040	2050	2060	2090	20100	20150	UNIT
			PT	PT	PT	PT	PT	PT	PT	PT	
Maximum repetitive peak reverse voltage	је	V_{RRM}	20	30	40	50	60	90	100	150	V
Maximum RMS voltage		V_{RMS}	14	21	28	35	42	63	70	105	V
Maximum DC blocking voltage		V_{DC}	20	30	40	50	60	90	100	150	V
Maximum average forward rectified current		I _{F(AV)}	20						Α		
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		I _{FSM}	200						А		
Maximum instantaneous forward voltage (Note 1) I _F = 10 A		V _F	0.55 0.70			0.	.92	1.02	V		
	T _J =25°C		0.5			0.1					
Maximum reverse current @ rated V _R	T _J =100°C	I _R		15 10		10 -			mA		
	T _J =125°C			-				5			
Typical thermal resistance		$R_{ heta JC}$	1.5						°C/W		
Operating junction temperature range		T _J	- 55 to +125 - 55 to +150					°C			
Storage temperature range		T _{STG}	- 55 to +150					°C			
Note 1: Pulse test with PW=300us 1%	duty cyclo										

Note 1: Pulse test with PW=300µs, 1% duty cycle

Document Number: DS_D1309027



ORDERING INFORMATION						
PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX ^(*)	PACKAGE	PACKING	
SR20xxPT (Note 1)	Н	C0	G	ITO-220AB	50 / Tube	

Note 1: "xx" defines voltage from 20V (SR2020PT) to 150V (SR20150PT)

^{*:} Optional available

EXAMPLE					
PREFERRED P/N	PART NO.	PART NO. SUFFIX	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
SR2060PTHC0G	SR2060PT	Н	C0	G	AEC-Q101 qualified Green compound

RATINGS AND CHARACTERISTICS CURVES

(T_A=25°C unless otherwise noted)

FIG. 1 FORWARD CURRENT DERATING CURVE

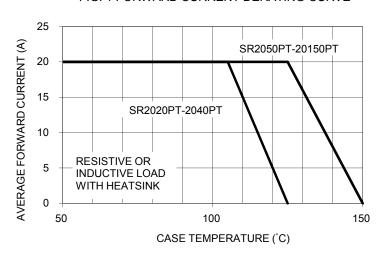


FIG. 2 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER LEG

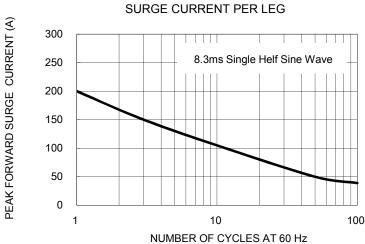


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

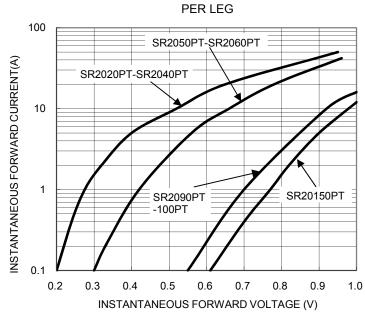


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

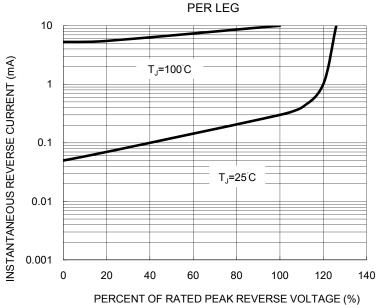




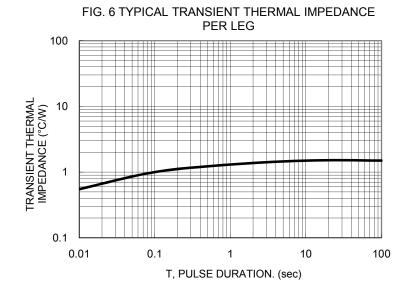


FIG. 5 TYPICAL JUNCTION CAPACITANCE PER LEG

10000
SR2020PT-SR2040PT
Vsig=50mVp-p

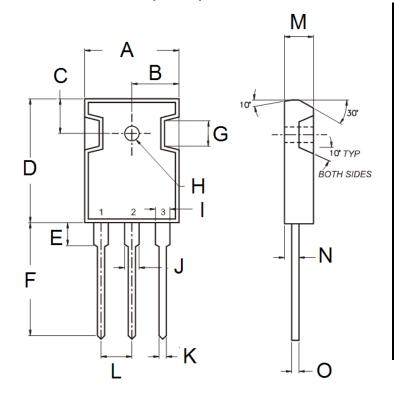
SR2050PT-SR2060PT
SR2090PT-SR20150PT

100
0.1
1
10
100
REVERSE VOLTAGE (V)



PACKAGE OUTLINE DIMENSIONS

TO-247AD (TO-3P)



DIM.	Unit	(mm)	Unit (inch)		
DIIVI.	Min	Max	Min	Max	
Α	15.90	16.40	0.626	0.646	
В	7.90	8.20	0.311	0.323	
С	5.70	6.20	0.224	0.244	
D	20.80	21.30	0.819	0.839	
Е	3.50	4.10	0.138	0.161	
F	19.70	20.20	0.776	0.795	
G	-	4.30	-	0.169	
Н	2.90	3.40	0.114	0.134	
1	1.93	2.18	0.076	0.086	
J	2.97	3.22	0.117	0.127	
K	1.12	1.22	0.044	0.048	
L	5.20	5.70	0.205	0.224	
М	4.90	5.16	0.193	0.203	
Ν	2.70	3.00	0.106	0.118	
0	0.51	0.76	0.020	0.030	

MARKING DIAGRAM



P/N = Marking Code
G = Green Compound
YWW = Date Code
F = Factory Code

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<u>SR2020PT SR2030PT SR2040PT SR2050PT SR2060PT SR20100PT C0 SR20150PT C0 SR2090PT C0 SR2050PT C0 SR2060PT C0 SR2040PT C0 SR2030PT C0 SR2050PTHC0 SR2040PTHC0 SR20150PTHC0 SR201</u>